Pvs28 Nucleotide Sequence

tecaeteeteettgttecaeaetttaletttgttteeee

																83	ag								1066
ccattcggccaccaactgcattatacaaaaacgactccc	ctttgagataacacccaactgagctcgattcccctcccc	actittgcgcctccccttgttcaaaatgaatacctacca	cagettgetgtteettetggeeategtgettaetgttaag	cacaccttcgcaaaggtcaccgcggagacccaatgcanaa	atggctatgtagtccaaatgagcaatcattttgaatgcaa	atgcaacgacgggtttgttatggcaaatgaaaacacttgc	gaggaaaaacgcgattgcacaaatccacaaaatgtaaata	aaanctgtggagactacgctgtgtgtgcaaacaccagaat	gaatgatgaggaaagagcattacgatgcggctgcatatta	gggtacaccgtaatgaatgaggtgtgtactccaaataaat	gtaacggcgttttgtgtggaaagggaaagtgcatcttaga	tcccgctaatgtgaacagcaccatgtgctcttgtaatata	ggaaccacattggatgaatctaaaaaatgtggaaagccag	ganaaactgaatgcacgttgaagtgtaaggcaaacgaaga	atgtaaagagactcagaattattacaagtgcgttgcgaag	ggaagcggcggagaaggcagcggtggagaaggcagcggcg	gagagggcagcggagagggcagcggckgagagggcag	cgglggagacacaggagcagcttacagtctcatgaacgga	tetgeagtaateageataetaettgtattegeettettea	tgatgtcattagtgtagacgattctacacacacacaaaa	catacacaagggagaagcgtctcacagagtcagttcaag	tcatacgcacaaaaaggaaagtacatccagctggtgaaa	gagcatttatgtgtgcagttatccttgggagaagcaccct	ccacccagttgcgttgctgttaccttaaaacttagtggca	ccatatcgaatttgactttgctcgc
40	80	120	160	200	240	280	320	360	400	440	480	520	999	009	640	089	720	160	800	840	880	920	096	1000	1040

Pvs28 Amino Acid Sequence

N-terminal-

NTRMNDEERALRCGCILGYTVMNEVCTPNKCNGVLCGKGKCILDPANVNSTMCSCNIGTTLDESKKCGKPGKTECTLKCKANE MNTYHSLLFLLAIVLTVKHTFAKVTAETQCKNGYVVQMSNHFECKCNDGFVMANENTCEEKRDCTNPQNVNKNCGDYAVCA ECKETQNYYKCVAKGSGGEGSGGEGSGGEGSGGEGSGGEGSGGDTGAAYSLMNGSAVISILLVFAFFMMSLV 7

2

-C-terminal

Pvs25 Nucleotide Sequence

AAGAAACCCTAGGCAAAGCATGCGGGGAATTTGGCCAGTGTATAGAAAAC AAAATGTACCAAAACGGGAGAAACTGCTTGTCAATTGAAATGTAACACAG IGCCCACCACGACCACAAAACTTATTCACCACCATCCGAGCGGAAAGG CGCTAAAGTATAGCAAGGCAGCCGTCACGGTAGACACCATATGCAAAAI GGACAGCTGGTTCAAATGAGTAACCACTTTAAGTGTATGTGTAACGAAGG CCAGACCCAGCACAGGTAAACATGTACAAATGTGGTTGCATTGAGGGCTA GCAGGTTGCTCATGTGCTATTGGCAAAGTCCCCAATCCAGAAGATGAGAA ATAATGAAGTCTGCAAAAATGTTGAAGGAGTTTACAAGTGCCAGTGTATG GTGGAGAAAGTGGCGAATGCATTGTTGAGTACCTCTCGGAAA1CCAAAGT AACGCCGCCCACTGTGCTGCCTACCTCCCCGAATAACAACTCCACTTAGC CACTTTGAAGGAAGACACTTGTGTGCTTGATGTATGTCAATACAAAATT CGTACGTCATATAAGTGCGAAACTTGCGCAGCTAAGCAGCGCAAATTTT GTTTTTCCGCTTGCCCGTTCGCCCGCTCCACACGCGCCGCTGCAAAGGT GAAGGCTTTACGTTCGACAAAGAGAAAAATGTATGCCTTTCCTATTCTGT CAAAATGAACTCCTACTACAGCCTCTTCGTTTTTTTCCTCGTCCAAATTG CTGACTTTCGTTTCACAGCACTGATTTTTTTGTTCGACCGCTCAATTCGC ATTTAACATCCTAAACTACTCCCTCTTCTTTATCATCCTGCTTGTCCTTT CACTIGCCATTTTCGATTGTTTGCTTGTTTGCTTTTTTGCTTATTCGCCC **FAAGTTAAAATACTTTTCTTTACTGAACTTACCGACTTGTGATG**1

Pvs25 Amino Acid Sequence

N-terminalMNSYYSLFVFFLVQIALKYSKAAVTVDTICKNGQLVQMSNHFKCMCNEGL
VHLSENTCEEKNECKKETLGKACGEFGQCIENPDPAQVNMYKCGCIEGYT
LKEDTCVLDVCQYKNCGESGECIVEYLSEIQSAGCSCAIGKVPNPEDEKK
CTKTGETACQLKCNTDNEVCKNVEGVYKCQCMEGFTFDKEKNVCLSYSVF
NILNYSLFFIILLVLSYVI

-C-terminal

Pvs25-Pvs28 Fusion Protein Amino Acid Sequence

N-terminal-

RMNDEERALRCGCILGYTVMNEVCTPNKCNGVLCGKGKCILDPANVNSTMCSCNIGTTLDESKKCGKPGKTECTLKCKANEEC AVTVDTICKNGQLVQMSNHFKCMCNEGLVHLSENTCEEKNECKKETLGKACGEFGQCIENPDPAQVNMYKCGCIEGYTLKED TCVLDVCQYKNCGESGECIVEYLSEIQSAGCSCAIGKVPNPEDEKKCTKTGETACQLKCNTDNEVCKNVEGVYKCQCMEGFTF DKEKNVCLS GGGPGGG AKVTAETQCKNGYVVQMSNHFECKCNDGFVMANENTCEEKRDCTNPQNVNKNCGDYAVCANT KETQNYYKCVAKGSGGEGSGGEGSGGEGSGGEGSGGEGSGGDTGAAYSLMN

-C-terminal

GGGPGG linker sequence underlined.

5/7

Constructs and recombinant protein of Pvs25 and Pvs28

II CONTO

Pvs25

_	_		
50	100	150	\widehat{S}
TCEEKNECKKET	/LDVCQYKNCGES	ACQLKCNTDNEVC	186 (SEQ TONO:16
HLSE	EDTC1	rget/	186
EAEASAVTVDTICKNGQLVQMSNHFKCMCNEGLVHLSENTCEEKNECKKET	LGKACGEFGQCIENPDPAQVNMYKCGCIEGYTLKEDTCVLDVCQYKNCGES	GECIVEYLSEIQSAGCSCAIGKVPEPEDEKKCTKTGETACQLKCNTDNEVC	KNVEGVYKCQCMEGFTFCKEKNVCLGPHHHHH

Apai

Pvs25 Ala 23

Nhel

Pvs28

Nhel

Pvs28 NCB

Pvs28 Q130

vs28

Ser 214 Apal

Apal

EAEASKVTAET(QNVNKNCGDYAV	EAEASKVTAETQCKNGYVVQMSNHFECKCNDGFVLANENTCEEKRDCTNP QNVNKNCGDYAVCANTRMNNEERALRCGCILGYTVMNEVCTPYKCNGVLC
GKGKCILDPAN	GKGKCILDPANVNSTMCSCNIGSTLDESKKCGKPGKTECTLKCKANEECK
ETQNYYKCVAK	ETQNYYKCVAKGSGGEGSGGEGSGGEGSGGEGSGGDTGAAYSGPH
ннннн 205	нинни 205 (segions/17)

50 100 150 200

Pvs28Q130

EAEASKVTAETQCKNGYVVQMSNHFECKCNDGFVLANENTCEEKRDCTNP	20
ONUNKNCGDYAVCANTRMNNEERALRCGCILGYTVMNEVCTPYKCNGVLC	100
GKGKCILDPANVOSTMCSCNIGSTLDESKKCGKPGKTECTLKCKANEECK	150
ETQNYYKCVAKGSGGEGSGGEGSGGEGSGGEGSGGDTGAAYSGPH	200
нанин 205 /сго со може	

Pvs28NCR

EAEASKVTAETQCKNGYVVQMSNHFECKCNDGFVLANENTCEEKRDCTNP	20
ONVNKNCGDYAVCANTRMNNEERALRCGCILGYTVMNEVCTPYKCNGVLC	100
GRGKCILDPANVNSTMCSCNIGSTLDESKKCGKPGKTECTLKCKANEECK	150
ETONYYKCVAKGPHHHHHH 169 CCC + CCC + CCC)	

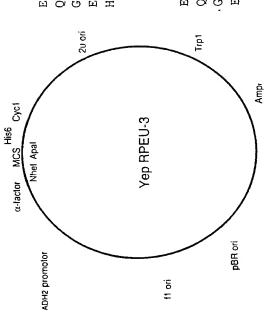


Figure 7

Experimental protocol for immunization with Pvs25 and Pvs28

